

Graduate School

Special Lecture

Online lecture via Zoom

1. Speaker: Assistant Prof. Marylka Yoe Uusisaari

Neuronal Rhythms in Movement Unit, OIST, Okinawa

2. Title: Inferior olive: new look

3. Time: Tuesday March 23, 2021; 16:00 - 18:00

4. Abstract: Neuronal computation performed by the cerebellum plays an indisputable and critical role as a general coordinator of brain function and animal behavior. While it has in the past been examined majorly in the context of motor function, it has in the past decade become clear that cerebellum is at least equally, if not more strongly, involved in coordinating cognitive functions. This shift in research focus calls for a new look at cerebellar function in a way that reaches beyond the classic framework of error-based motor learning.

Importantly, even though the vast majority of cerebellar research is probing the structure, function and perturbations of the cerebellar cortex, the ultimate output of the cerebellum is undoubtedly shaped by activity in the inferior olive by means of complex spikes. In the past, the complex spikes have been seen as unitary, invariant all-or-none error signals, however, recent evidence has clearly shown that there is a possibility for much broader range of signaling in the form of spike duration modulation. Thus, it is necessary to examine the spikes generating mechanisms in the inferior olive in more detail, if we are to decipher the meaning of this signaling pathway.

In this talk, I will give an overview of what is presently known about the function of the mouse inferior olive, what are the most pressing questions to be answered, and discuss the questions posed by some very recent results regarding the cerebellar function as a general behavior coordinator.

Contact Dr. Izumi Sugihara for the Zoom address

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大学院特別講義

(医歯学先端研究特論)(生命理工学先端研究特論)
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Zoom によるオンライン講義

記

1. 講師 : **Assistant Prof. Marylka Yoe Uusisaari**

Neuronal Rhythms in Movement Unit, OIST, Okinawa

2. 演題 : **Inferior olive: new look**

3. 日時 : 2021 年 3 月 23 日 (火) 16 時 00 分～18 時 00 分

4. 要旨 : Neuronal computation performed by the cerebellum plays an indisputable and critical role as a general coordinator of brain function and animal behavior. While it has in the past been examined majorly in the context of motor function, it has in the past decade become clear that cerebellum is at least equally, if not more strongly, involved in coordinating cognitive functions. This shift in research focus calls for a new look at cerebellar function in a way that reaches beyond the classic framework of error-based motor learning.

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受講ご希望の方は、下記までご連絡下さい

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